procedures, and OSS. The feasibility and cost of manufacturing such equipment in a manner that meets industry standards will need to be analyzed and understood based on those new standards and capabilities. The cost of designing and implementing these new standards, systems, practices, etc supporting multiple use of loop bandwidth must also be quantified. At the same time, the demand, if any, for each particular spectrum sharing application must be identified. On that basis, the Commission and the industry will be in a position to determine if and how spectrum sharing may be feasible and if it is a viable offering.

If after this analysis, spectrum sharing were deemed feasible, management of the local loop on a bandwidth basis would require significant and expensive enhancements to existing practices, procedures, and support systems. Such enhancements would likely take approximately two years to complete -- after national standards and requirements were developed. As discussed below, any spectrum sharing requirement at this time would be unwise and premature.

A. Spectrum Sharing May Adversely Impact Existing and Potential New Advanced CPE and Voice Services.

It is premature to mandate spectrum sharing on unbundled loops until the potentially undesirable/unintended adverse impact of that decision on voice services and CPE is understood. Reserving the higher frequencies on a loop for data spectrum sharing could permanently relegate voice services and CPE to the lower voice frequencies. The resulting inability to use higher frequencies for voice services could effectively chill the development of future voice offerings and CPE that use signaling or other functions in frequency bands outside of the normal voice range.

Even today, a number of Ameritech's business customers utilize electronic key phone type services that use signaling frequencies in the 8 KHz range. This range is well beyond the 3 KHz that typically defines the upper limit of voice band transmissions. In addition, Ameritech provides unbundled electronic key type loops, which enable CLECs to provide an equivalent service that supports these electronic key sets, using the unbundled loops in conjunction with the CLEC's switching equipment. Both of these service applications could be imperiled if spectrum sharing is introduced in a way that limits voice services to the lower end of the spectrum and reserves the higher range for data services.

B. The Technical, Compatibility, Service Quality, Operational, and Administrative Requirements of Spectrum Sharing Must be Fully Understood Before it is Mandated.

Although the concept of loop sharing through the use of different ranges of the spectrum may appear on the surface to be attractive, it is clearly premature to require its implementation at this time in light of the outstanding technical, operations and administrative issues it creates.

1. The Commission Should Address Loop Spectrum Compatibility and Interference Issues Through Mandatory Standards, Practices and Procedures Adopted Through an Industry Forum Process.

The best method to address loop spectrum issues is through national standards, procedures and practices that provide the level of compatibility necessary to avoid harmful interference between equipment, carriers and services. This objective can best be met through the use of existing industry forum processes, in which all aspects of the issue are fully considered by industry experts, and the needs of all affected parties are fully considered.

Manufacturers are introducing an increasing number of new technologies and equipment connected to local loops, and making ever more sophisticated use of spectrum. Each of these new technologies and pieces of equipment creates a significant risk of interference with other facilities and equipment. Individual carriers are not in a position to test each new technology or product that is manufactured or installed by others to ensure that it does not create interference.

The answer to this problem is to develop new standards for spectrum management through existing, informal industry processes. These industry forums permit the timely analysis of new technologies and service applications in a problem-solving environment open to all industry participants. In recognition of the growing urgency of spectrum management issues, the industry is working to develop standards for Power Spectral Density (PSD) through the standards process. Ameritech strongly supports this effort and believes that it is the most effective means of ensuring that new devices are designed to minimize interference within the same loop cable or binder group.

2. The Presence of Multiple Signal Formats on The Same Local Loop Creates Significant Risks of Interference.

The current concerns about spectrum interference are magnified when two different providers use spectrum on the same physical local loop. If customer premise equipment ("CPE") or central office-based equipment can create interference for users of separate facilities, this risk is increased when two carriers use bandwidth within the same physical loop facility. Moreover, dual use of the same local loop also creates new and different requirements for equipment compatibility across all manufacturers. The standards for network protection and compatibility must be national and mandatory

before the Commission can seriously consider requiring the sharing of the loop spectrum range by multiple carriers.

As a technical reality, effective management of the Power Spectral Density ("PSD") of signals transmitted on copper pairs in the same bundle or cable is the only way to ensure against degradation (e.g., crosstalk) of services conveyed via the local loop network. Elimination of cross-talk and other forms of degradation can only be controlled by limiting the PSD of signals transmitted by all carriers and end users on the same loop. Specifications will be required for the maximum PSD over the entire frequency band from DC to approximately 30 MHz. Assuming standards for PSD did exist across the entire spectrum, effective management of the services and loop would still require inventory, engineering, and assignment systems which do not currently exist.

3. CPE Must be Manufactured to Meet Standards That Protect Against Harmful Interference and Manufacturers Must Perform Appropriate Tests.

The Commission asks what ways are available to determine when a particular service, technology, or piece of equipment may cause network interference and should be prohibited.[40] This can best be achieved through mandatory national standards that assure that each piece of equipment conforms to requirements that mitigate the risk of interference. Equally important is the requirement that manufacturers test to confirm that each new piece of equipment meets the standards.

Identifying the source of cross-talk requires investigation by highly skilled technicians, using advanced analysis equipment, and is akin to finding the proverbial needle in a haystack. Therefore, curing the problem after the fact is very difficult and

[40] NPRM, ¶160.

time consuming, and is not a solution that can assure reasonable levels of quality. More importantly, prevention of interference problems means that service will not be degraded in the first place. Therefore, manufacturers should certify that their equipment complies with defined standards for PSD and has successfully passed prescribed tests before it is connected to the network. Such standards should be the result of an industry standards body such as T1E1.

Historically, the process for developing "new" standards recognizes the presence of existing technologies and seeks to accommodate them. Put another way, to the extent that existing equipment is not causing a problem, it is allowed to remain connected to the network, and any new equipment is designed to be compatible with that equipment. Since existing standards-based digital subscriber line systems have been designed with spectral compatibility in mind, their continued use should not present any problems.

Where existing technologies may not meet current standards, problems may arise as newer technologies are introduced. Ameritech does not currently have the technical ability or information necessary to anticipate or prevent all new problems that could arise with non-compliant CPE. Therefore, any existing non-conforming CPE should be dealt with on a case-by-case basis.

4. The Commission Should Support National Standards Adopted Through an Open Industry Forum Process.

The Commission should base any spectrum management standards on proposals developed by T1E1. Since spectrum sharing involves interconnection of equipment by all carriers and requires compatibility and compliance among all carriers, the standards should be mandatory and apply to all manufacturers, and providers, including ILECs, CLECs, resellers and other providers.

Given that multiple carriers may be connecting advanced service technologies on the same loop cables, in order to provide the best possible service to their customers there should be a common effort to avoid interference. All interested parties should be willing to cooperatively participate in the prevention and identification of potential problems and the development of standards. Such collaboration involving all competing interests is the best way to quickly sort real from imaginary problems. To that end, these standards should be based on analysis and recommendations from industry technical experts within the standards bodies. The T1E1.4 Working Group has already begun the development of a draft ANSI standard for Local Loop Spectral Compatibility.

All industry standards forums involve the participation of a broad range of entities (e.g., vendors, providers, end users, etc.) through an informal consensus process. As a result, Ameritech expects that any resulting standards and other requirements will be no more restrictive than necessary to assure the compatibility of various types of technologies and equipment used by multiple providers. These same industry standards forums can update standards quickly over time as additional, newer technologies are introduced and new problems arise.

5. The Commission Should Permit, But Not Require, Carriers to Share Spectrum Over The Same Local Loop.

The Commission asks if it should permit two different service providers to offer services over the same loop, with each provider utilizing different frequencies to transport voice or data over that loop.[41] The Commission should not prohibit carriers from voluntarily entering into these arrangements on a case-by-case basis, under terms

[41] NPRM, ¶162.

they believe will prevent interference and that create the level of compatibility and cooperation necessary to provide this type of service.

However, as previously discussed, spectrum management is already a major issue within the telecommunications industry and standards have not yet been finalized for addressing spectral compatibility across wire pairs. The ability to effectively manage spectrum capability when multiple providers share, via frequency separation, the same physical loop, will require additional standards beyond those currently contemplated. Thus, it is premature to consider mandating that any carrier be required to enter into such an arrangement.

Moreover, carriers do not yet have the operational, procedural, administrative, systems, practices, and OSS necessary to manage the use of bandwidth (spectrum) used by multiple carriers on the same local loop. Simply put, local loop facilities and support systems were designed for integrated operation and control by a single carrier. As a result, each existing procedure, practice and OSS that supports local loop installation, operation, maintenance, and billing must be reviewed and possibly revamped before loop sharing can be seriously considered. It is premature to decide if loop sharing is feasible or a viable offering until the nature, scope, effectiveness, and cost of each of these changes is fully understood and quantified.

When multiplexed digital systems (e.g., T carrier) were introduced into the interoffice trunking environment, support systems necessary to engineer, provision, assign, maintain and administer those systems had to be likewise be developed, modified, or enhanced, and were deployed coincident with the technology. Until those tasks were completed, carriers did not had the ability to manage "bandwidth" across a physical

copper interoffice pair. With the rapid introduction of fiber and SONET based systems, carriers have again been challenged to keep up even in the trunking and private line networks.

Another example of the impact of loop sharing on ILEC operations is that, today, the local loop facility to end users is engineered, provisioned, assigned, and maintained as a single physical entity. OSS used by personnel performing these functions do not have the capability to "manage" multiple carrier use of the same facility or only a portion of the local loop defined by a specific bandwidth. For example, a simple loop-back test performed by one carrier on a shared loop may disrupt its end user's service as expected, but may also, unadvoidably, without notice, disrupt service to another carrier's customer using the same loop. OSS will need to be enhanced to provide all required capabilities.

Any decision by the Commission to require the sharing of the same local loop by multiple providers must be conditioned on the resolution of these numerous issues in order to ensure continued reliability and high quality service. The Commission should reject attempts by parties who seek to minimize these issues. They are real and must be addressed.

Examples of the operational, procedural, administrative, and OSS issues that must be addressed include:

- cooperation between carriers on the same loop
- compatibility and cooperation with alarm service providers
- diagnosis and isolation of loop service quality problems
- loop upgrades and rearrangements that may affect several carriers differently using the same loop
- establishment of a record of the services and equipment associated with each loop
- loop conditioning to support spectrum sharing

- re-conditioning to return the cable to voice usage
- gathering of loop make-up data needed to assign loops for spectrum sharing
- the need to measure the transmission characteristics on many loops

The administrative problems associated with dual sharing of the same loop are daunting enough, but it is unlikely that in the long run such sharing could be limited to just two channels or two providers on the same loop. However, the "sharing" of a single loop among providers will not likely be limited to the provision of traditional voice plus one "advanced service" or to only two providers. The bandwidth spectrum available for potential sharing covers a wide range all the way from sub-voice to perhaps 30 MHz depending on the loop length and gauge. Manufacturers and carriers are likely to seek access to specific and in some cases narrow frequency bandwidths based on their product design and services. This phenomenon will likely create the technical capability to support, demands for more than two users of the same loop.

As with radio frequency spectrum, it will likely be necessary to implement a means of administering the local loop spectrum. For example, a third party administrator may be needed to arbitrate, assign, and manage the assignment process, if full and open access to the entire frequency spectrum is envisioned. It is doubtful that all industry participants would find comfort in any one member of the industry making such decisions.

6. It is Premature For The Commission to Mandate That ILECs Permit CLECs to Use Higher Frequencies on The Same Local Loops The ILEC Uses to Provide Voice Grade Service.

As discussed above, it is premature to consider the issue of whether a CLEC should have the right to place a high frequency signal on the same loop an ILEC is using to transmit voice signals. Not only will premature mandating of spectrum sharing

potentially impair the quality of service, it will also distort the development of the competitive marketplace.

Equally as important, it could lead to the premature deployment of the wrong technology or equipment, thereby, impairing the introduction of more compatible technologies and equipment at a later date. It could also impair the usefulness of some CPE that uses of the same bandwidth that has now been reserved for spectrum sharing that may never materialize. For now, the Commission should initially focus on identifying the issues and the means necessary to resolve them as a precondition to considering whether, as a matter of policy, loop sharing should be mandated.

As discussed above, the Commission should not prohibit such spectrum sharing arrangements where the two carriers have entered into an agreement that they believe will properly manage the many technical, operational and administrative issues. However, it is premature to consider mandating such arrangements at this time. When the CLEC is taking the "entire loop", the "selling" of the voice channel to another carrier creates many of the same interference and compatibility challenges previously discussed. Assuming that spectrum compatibility guidelines existed, there would still need to be some form of assignment and record keeping capability by someone to track the use of the loop so it can be maintained. The question then arises whether the purchaser of the entire loop incurs the obligation to provide such spectrum management and inventory tracking.

In summary, there appear to be three fundamental approaches to sharing of the spectrum available on a local loop. The simplest approach would be to avoid sharing among providers and declare the entire spectrum to be available only to the loop owner or purchaser. The other two approaches involve more than one provider using the same

loop. The Commission must recognize that such a new paradigm cannot be limited to the simple sharing of the loop between two services such as advanced data services (e.g., xDSL) and POTS. Once the line is crossed, manufacturers and providers of a plethora of services will seek to access the specific frequency range necessary for their application.

Regardless of the specific spectrum sharing approach under review, most of the same issues arise and must be addressed. The issues include standards and systems support to ensure that sufficient engineering, assignment, and record keeping capabilities are present to properly provision, maintain, and repair a shared loop. The particular approach chosen does not significantly alter these requirements.

It takes little imagination to envision spectrum allocation charts for loops much like those for radio spectrum. The "all spectrum is assigned" approach is the most complex approach and in Ameritech's opinion too administratively cumbersome to be workable. In the least, the consumer benefits may not outweigh the costs. This approach would require a "spectrum administrator" performing a function much like the FCC currently does for radio spectrum.

V. TO THE EXTENT ADDITIONAL COLLOCATION MEASURES ARE NEEDED TO PROMOTE THE DEPLOYMENT OF ADVANCED SERVICES, SUCH DETAILS SHOULD BE PURSUED THROUGH NEGOTIATIONS OR ARBITRATION.

A. National Standards Are Not Needed or Appropriate.

In the NPRM, the Commission specifically inquires as to whether it should adopt additional collocation rules "to ensure that competing providers have access to physical collocation space so that they are able to provide advanced services using their

equipment."[42] The answer is no. The language and structure of the Act clearly demonstrate that collocation measures should be determined through negotiation and arbitration – not federal regulation. Moreover, the Commission does not appear to have authority to issue collocation rules, except to the extent it determines xDSL technology is an interstate (or jurisdictionally mixed) offering.

The local competition provisions set forth in sections 251 and 252 rely on private negotiations, supplemented by arbitration before state regulatory commissions and by review in the federal courts. Collocation measures, therefore, can be properly defined only by the parties responsible for defining those obligations in the first place: the private parties that negotiate such contracts, the state commissions with exclusive authority to arbitrate them, and the federal courts with exclusive jurisdiction to review state commission determinations.

The "terms and conditions" of an incumbent's provision of collocation "for interconnection or access to unbundled network elements. . .", and are governed by sections 251 and 252 of the Act. Where the Act refers to terms and conditions, it uses them hand in hand with "agreements" – a subject left to private negotiations, state arbitration, and federal court review – or with "rates" – a subject that the Eighth Circuit has expressly ruled to be off limits to this Commission, including the Commission's interconnection pricing rules.[43] See, section 251(c)(1) (describing duty to negotiate "terms and conditions of agreements to fulfill the duties described" in section 251, in accordance with process of negotiations and arbitration set forth in section 252); section

[42] NPRM at ¶121.

[43] Iowa Utilities Board v. FCC, 120 F3d 753 (8th Cir. 1997), at 819, note 39.

251(c)(2)(D) (referring to "rates, terms and conditions of interconnection); section 251(c)(3) (referring to "rates, terms, and conditions" of provision of unbundled network elements); section 251(c)(6) (referring to "rates, terms, and conditions" of collocation); and, section 251(c)(6) (refering to "the State commission," not this Commission, in the event physical collocation is not available).

The conjunction in sections 251 and 252 of "rates, terms, and conditions" is not accident: Just as it make no sense to prescribe measures for enforcing contractual obligations in a vacuum – that is, without simultaneously defining and considering what the contractual obligations will be – it makes no sense to set terms and conditions for an item's provision without simultaneously setting the rates at which provision will take place. Under the contractual, deregulatory framework envisioned by the Act, price and cost are linked to terms and conditions. And that applies to collocation "rates, terms and conditions."

Two years of consistent practice under the Act confirm the existence, and desirability, of relying in the first instance on contractual arrangements between private parties to define collocation rates, terms and conditions. During this time, incumbents and CLECs have established and defined numerous collocation arrangements using the process of negotiation, arbitration, and judicial review set forth in the 1996 Act. Under this de-regulatory framework, carriers assumed "[t]he duty to negotiate in good faith in accordance with section 252" binding agreements to fulfill the obligations described in sections 251(b) and 251(c). The subject of collocation has been intensely negotiated and arbitrated. And just as the Act envisions, collocation rates, terms and conditions have been resolved as important contractual obligations.

These carrier-specific agreements properly reflect the give and take that is inherent to contracts and antithetical to the one-sided regulatory fiat structure that Congress rejected but that the Commission again seeks to impose. Contractual resolution balances the real business needs specific to each competitor while accommodating the practical limitations of feasibility and cost-effectiveness facing each incumbent. The multiple permutations of physical site conditions and proposed accommodations suggested by the commenting parties in this docket is compelling confirmation that this matter does not require and is not appropriate for uniform federal regulation, but is instead best left as Congress required in section 251(c)(1) – to good faith negotiations between individual carriers, subject to state commission action and federal judicial review as set forth in section 252.

Of course, in addition to the formal procedures in section 252, Ameritech routinely works on a business-to-business basis with carriers requesting collocation. Ameritech's policies and practices are outlined in its tariffs and interconnection agreements. When concerns arise over various aspects associated with implementing collocation, Ameritech sits down with the requesting CLEC to determine if the obstacles, questions, or concerns can be addressed and resolved. An example of how an ILEC and CLEC can resolve issues is demonstrated by the agreements that have been reached between Ameritech and NorthPoint Communications. Attached to these comments as Attachment 2 is a Joint Statement of Principles Applicable in a Separate Subsidiary Environment by Ameritech and NorthPoint. While this document primarily addresses issues related to collocation that NorthPoint raised in a July 29 ex parte contact with the Commission, it also addresses positions related to spectrum management and limited

interLATA relief. Ameritech and NorthPoint have had productive business-like discussions. This is not, and should not be, the exception. Two carriers with pro-competitive policies can typically find a business solution to any dispute. Implementation of the principles outlined in this Joint Statement would eliminate many of the concerns raised by CLECs related to non-discriminatory treatment.

Finally, there is a serious jurisdictional issue regarding the Commission's authority to issue collocation rules, unless the Commission finds that xDSL is an interstate offering. The Commission finds its authority in the Eighth Circuit's ruling that upheld the Commission's unbundling rules.[44] There is no statutory support for the Commission's claim and its reliance on Iowa Utilities Board is misplaced.

Indeed, the Court's opinion in Iowa Utilities Board indicates that the Commission does not have authority to issue such regulations. Specifically, the Commission attempted to use section 251(d)(1) as justification for "overarching plenary authority to regulate all aspects of section 251". However, the Court found that, to the contrary, section 251(d)(1) was not a broad grant but rather referred "only [to] the areas in section 251 where Congress expressly called for the FCC's involvement."[45] Further, the Court specifically noted:

> Such areas are limited to subsections 251(b)(2) (number portability), 251(c)(4)(B) (prevention of discriminatory conditions on resale), 251(d)(2) unbundled network elements), 251(e) (numbering administration), 251(g) (continued enforcement of

[44] Iowa Utilities Board v. FCC, at 818, note 38. The validity of the Commission's collocation rules was not before the Court. In fact, the Court was addressing specifically the Commission's unbundling rules which "purport[ed] to implement the ILECs' duties to provide unbundled access to the ILECs' network under subsection 251(c)(3)."(Id. at 807). In other words, §§51.321-3 of the Commission's rules, issued ostensibly under authority of §251(c)(6) of the Act, were not in issue.

[45] Id. at 794.

exchange access), and 251(h)(2) (treatment of comparable carriers as incumbents).[46]

Significantly, subsection 251(c)(6) (collocation) is missing from that list. Accordingly, unless the Commission determines that xDSL is interstate, it has no intrastate collocation authority.

B. Ameritech Already Makes Options Available That Reasonably Minimize Carriers' Collocation Costs.

Notwithstanding the jurisdictional issue, the statutory structure is working fine. Ameritech's current practices completely comply with the requirements of section 251(c)(6) in a way that reasonably minimizes potential costs to collocating carriers. For example, State commissions have already ruled on the price of collocation in the context of their review of section 252 interconnection agreements. In the case of the Ameritech states, the same pricing standards are applied to collocation as are applied to interconnection and unbundled elements under section 252(d). These prices are reasonable and, if either party disagrees, it can appeal to the U.S. District Court. In any event the price of collocation arrangements cannot be an issue here.[47]

In this regard, the Commission's concern about reducing competing carriers' collocation costs should also be tempered by the successful implementation of collocation arrangements in certain areas. Ameritech, for example, has a long history of taking a pro-competitive approach to collocation. In 1991, Ameritech became one of the country's collocation leaders with its expanded interconnection arrangement with Teleport in Illinois. Ameritech has consistently endeavored to approach collocation

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[46] Id. at note 10.

[47] See, Iowa Utilities Board v. FCC, supra.

reasonably -- in a way that provides collocating carriers with flexibility and poses no unreasonable restrictions on their ability to offer competitive services. For example, after the 1994 Court of Appeals decision overturning the Commission's expanded interconnection physical collocation requirement,[48] Ameritech pioneered the $1 lease virtual collocation arrangement by which collocating carriers can control their equipment costs by buying their own terminating equipment and leasing it to Ameritech for $1 for placement in virtual collocation space. In addition, Ameritech's practices contemplate that collocating carriers can also control their costs by negotiating directly with approved vendors on both the timing and price for the installation of collocated equipment. Further, Ameritech has negotiated interconnection agreements that permit the collocating carrier, in lieu of training Ameritech technicians, to have its own technicians perform some maintenance under escort in virtual collocation arrangements.

Ameritech has more than 950 collocation arrangements for competing carriers -- involving a total of 32 different carriers. The arrangements also cover 339 wire centers/central offices, giving collocating carriers immediate accessibility to more than 13 million access lines -- 65% of Ameritech's total access lines. Thus, in Ameritech serving areas, collocation is already a rousing success.

Further, although the Commission focuses on physical collocation, in fact virtual collocation has presented itself as a reasonable, efficient method of interconnection or accessing unbundled network elements. Of all collocation arrangements in Ameritech offices, approximately 43% are virtual collocation arrangements. In Ameritech's experience, this continues to be a popular collocation vehicle, not exclusively due to lack

[48] Bell Atlantic v. FCC, 24 F.3d 1441 (D.C. Cir. 1994).

of space for physical collocation, but because it is cost-effective. This is real evidence that virtual collocation is a viable method of providing for interconnection or access to unbundled network elements. Thus, physical collocation should not be viewed as the only acceptable, or even in all cases as the most desirable, method of collocation.

Following, Ameritech will address specific collocation questions raised by the Commission in the NPRM and show that Ameritech imposes no unreasonable conditions on such arrangements.

1. Collocation Equipment Issues.

Switching equipment. The Commission has sought comment on whether it should require ILECs to permit the collocation of equipment that performs switching functions.[49] Even if the Commission had authority to issue collocation rules, it is clear the Commission would have no authority to require ILECs to permit the collocation of equipment that performs solely switching without regard to any function contemplated by section 251(c)(6) (interconnection or access to unbundled elements). In the Bell Atlantic case,[50] the Court of Appeals held that the FCC had no authority to order physical collocation because that amounted to a "taking" of property. No administrative agency has such authority unless it is expressly authorized by Congress; and, at the time, the Communications Act gave the FCC no such express authority. The Act, however, mandated that ILECs provide for physical collocation of equipment "necessary for interconnection or access to unbundled elements".[51] Thus, assuming, arguendo, that the

[49] NPRM, ¶¶129-131.

[50] See, note 48, supra.

[51] Section 251(c)(6).

Commission's authority to order physical collocation has been expanded by the Act,[52] it would necessarily be limited to the functions included in section 251(c)(6). Since switching is not such a function -- i.e., not necessary for interconnection or access to unbundled network elements -- the Commission clearly lacks authority to order the collocation of that functionality by itself.

Addressing the specific equipment referenced in the NPRM other than switching equipment, Ameritech currently permits the placement, in collocation space in its central offices, of traditional multiplexers, DLC systems, DSLAMs, and remote monitoring equipment to facilitate the competitive provision of xDSL services over its loops.[53]

Cross-connecting collocating carriers. The Commission points out that collocating carriers have the ability to connect to each other as long as they are also collocated for the purpose of interconnection or access to unbundled network elements.[54] However, it also asks if it needs to do more on the subject.[55] Ameritech allows collocating carriers to connect to the equipment of other collocating carriers.[56] Collocating carriers may interconnect with each other in the same office and even when in different offices (using their own facilities or unbundled local transport). When in the same office, collocating carriers in the same general proximity may connect to each other directly through a coaxial cable or fiber. The only requirements are that Ameritech be

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[52] A point that Ameritech makes here for argument's sake only.

[53] See NorthPoint July 29 ex parte, Remedies 14 and 15.

[54] NPRM, ¶133.

[55] Id.

[56] See e.g., Attachment 3, relevant provisions of Ameritech's interconnection agreement with AT&T specifically permitting cross-connection with other collocating carriers.

notified and that the connection utilizes existing cable racking in an appropriate manner. In all other circumstances, collocating carriers can interconnect to each other utilizing Ameritech's cross-connection service for interconnection ("ACCSI") which is the same mechanism used when connecting to an Ameritech service.

Equipment specifications. The Commission has inquired as to whether competitive LECs should be required to use Bellcore Network Equipment and Building Specifications ("NEBS")-compliant equipment where the ILEC uses NEBS-compliant equipment for equivalent functions.[57] The Commission requested that parties address whether allowing non-NEBS compliant equipment would introduce new vulnerability into ILEC central offices. The Commission also specifically requested commenters to distinguish between safety requirements and performance requirements.[58]

At this time, Ameritech requires NEBS Level 1, 2, and 3 compliance for both Ameritech equipment and for carrier equipment collocated on Ameritech premises which interconnects with Ameritech's network. It also requires compliance with the general thermal heat dissipation and corrosion limitations that are part of NEBS SR-3580. To the extent that the collocated equipment does not interconnect with Ameritech's network, then only applicable industry-approved safety and electrical interference standards would apply. Ameritech does not refuse to collocate equipment that does not interconnect with Ameritech's network on the grounds that the equipment fails to meet reliability standards.

[57] NPRM, ¶135.

[58] Id.

With respect to "listing" approved collocation equipment,[59] Ameritech believes that such a report is not necessary since equipment compliant with appropriate standards would be approved. Moreover, for an ILEC to list all of its own equipment would be extremely burdensome. Ameritech has hundreds of wire centers, all of which would have be surveyed. Moreover, a substantial amount of that equipment would be irrelevant to collocation – e.g., switches, RSUs, etc. Thus, there is no incremental benefit to such a report that would justify the additional time and effort.

2. Allocation of Space.

"Cageless" collocation. The Commission asks for comment on its tentative conclusion to require cageless collocation.[60] Ameritech does not require that collocation space be "caged." A cage exists primarily for the security benefit of the collocating carrier. If the collocating carrier wishes to install a cage in collocation space, it can arrange for the installation by a vendor of its choosing.

However, whether cages are installed or not, in those situations involving non-partitioned space without separate keyed entrances, ILECs should be allowed to require escorts for CLEC technicians. Because ILECs have responsibility for basic services provided out of the central office -- including lifeline and 911 services -- it is the CLEC's responsibility to ensure that nothing be done to jeopardize that service. It would be unreasonable to prohibit the ILEC from requiring an escort to guard against any, even inadvertent, damage to ILEC equipment.[61]

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[59] Id., ¶134.

[60] Id., ¶¶137-141.

[61] Id.

Minimum space requirements. The Commission further inquired into giving collocating carriers the option to order space without a minimum size.[62] Ameritech has indicated that, in negotiations of section 252 agreements, it will consider requests for physical collocation space smaller than the standard 100 square feet. The Commission should not create any inflexible mandate in this regard. In the context of interconnection agreement negotiations, the parties can easily address any unique issues that could arise because of a non-standard space configuration.

Shared collocation. The Commission has inquired into the advisability of requiring shared collocation arrangements.[63] It is unclear exactly what the Commission had in mind when it referred to such arrangements. However, there is a danger that, if the Commission were to require "shared" arrangements without restrictions, with collocation priced at long-run incremental cost rates, an entity might request collocation primarily to provide collocation to other carriers on a resale basis in an ILEC central offices. Such a collocating carrier would, of course, initially request more space than what itself could utilize since it would intend to sublease collocated space to other carriers at rates or fees which, when totaled, would exceed the recurring and/or nonrecurring rates the original carrier would pay to the ILEC for collocation. This arbitrage situation should be discouraged. Nonetheless, Ameritech is willing to explore the possibility of shared arrangements in the context of negotiated section 252 agreements.

Obsolete equipment. The Commission has asked whether it can and should require ILECs to remove obsolete equipment and non-critical offices in central offices to

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[62] Id., ¶137.

[63] Id.

increase the amount of space available for collocation.[64] In the normal course of business, Ameritech routinely removes equipment that is not "used and useful" from its central office space. However, determining whether equipment is "obsolete" and should be removed is a more complicated question. On occasion, obsolete equipment may actually be in use simply because a replacement upgrade has not yet taken place. Mandating removal of the equipment in this case would not be responsible. Moreover, to order the ILEC to make the replacement would unduly interfere with the management of the ILEC's operations. Replacement activity is scheduled with an overall view for efficiency and in order to maximize the benefits to the most customers. To order a particular replacement could jeopardize the ILEC's ability to serve its customers in the best way that it can.

In other words, the real question is whether a piece of equipment is "used and useful" in its current location. That question is very fact-specific and the facts will vary from one situation to the next. It would not be reasonable for the Commission to make a generalized ruling in this regard and attempt to apply it to all situations since that would unreasonably interfere with the ILEC's management of its common carrier responsibilities.

Up-front preparation charges. The Commission has expressed concern that the initial collocating carrier in a given space not be charged for the entire cost of preparing the space if other carriers are expected to occupy that space as well.[65] Ameritech does not include a "first-in penalty" in its rate for collocation. Rather, its rates are determined

[64] NPRM, ¶142.

[65] NPRM, ¶143.

using estimated demand and spreading the cost to condition the space over the anticipated demand. In other words, Ameritech's rates are averaged and recover the central office build-out space conditioning cost over time from multiple customers. Thus, there is no extraordinary burden placed upon the first carrier collocating in any central office.

Delays. The Commission has sought comment on the alleged delay between ordering and provisioning of collocation space.[66] In Ameritech's case, there are no unreasonable delays. First, Ameritech allows carriers to begin collocation even prior to state certification or an interconnection agreement. Existing tariffs allow for non-certified carriers to collocate. In these cases, the tariff terms and conditions would apply until a superceding interconnection agreement is completed and approved.

With respect to the process itself, the installation of a physical collocation arrangement is a complex one that involves work by both parties. Intervals are often established in interconnection agreements and are based on facts raised by the parties in negotiations. Ameritech is aware of no specific complaints to any regulatory body regarding any alleged delay or failure to meet a negotiated due date with respect to any of its physical collocation arrangements.

Many negotiated interconnection agreements reflect the following: When Ameritech receives an order for physical collocation, it responds within 10 days as to whether space is available and provides an initial estimate of the central office build-out ("COBO") charge. The carrier then has 30 days to make an initial installment. Within 10 business days of the payment, that carrier may have an initial walk-through the office. Within 10 days after the walk-through, Ameritech provides a final quote for the total

[66] Id., ¶144.

installation charge and an installation completion date. In light of the fact that each installation constitutes a "custom order", this process proceeds at a reasonably swift pace. Although, on average, Ameritech typically completes collocation installations within 90 days of the initial walk-through or 120 days of the receipt of an order, the actual completion interval for particular job depends on the nature of the job itself and the location. The interval can reasonably vary not only between offices, but even for different installations in the same office depending on conditions and the individual needs of the collocating carrier. So imposing a fixed interval would not be reasonable.

In addition, the Commission should be sensitive to the fact that a reasonable due date could be influenced by the installation demand itself. Large numbers of collocation orders placed at the same time could result in extended due dates for those and some subsequent orders.

Finally, the Commission has proposed performance measurements regarding collocation which, subject to the modifications suggested by Ameritech, should eliminate any further concerns in this area.[67]

3. Space Exhaustion.

Documentation. The Commission has inquired into several proposals dealing with space exhaustion – including requiring "walk-throughs" and detailed reports of available space.[68] Ameritech does not object to presenting its case to State commission(s) when space for physical collocation is not available. That, of course is the

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[67] See, In the Matter of Petition of LCI and CompTel for Expedited Rulemaking, CC Docket No. 98-5, Notice of Proposed Rulemaking (released April 17, 1998) and Ameritech Comments and Reply Comments filed June 1, 1998 and July 6, 1998.

[68] NPRM, ¶¶146-7.